Title
Unconscious Mental Life

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Author
Kihlstrom, JF

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Hypnosis

John F. Kihlstrom
University of California, Berkeley, Berkeley, CA, USA

Synonyms

Animal magnetism, Artificial somnambulism, Hypnotic suggestion, Mesmerism, Suggestion, Trance

Definition

Hypnosis is an altered state of consciousness in which the subject responds to suggestions by the hypnotist for alterations in perception, memory, and the voluntary control of action. In the classic case, these responses entail a degree of subjective conviction bordering on delusion and an experience of involuntariness bordering on compulsion (Kihlstrom 2008; for comprehensive coverage, see Jamieson 2007; Nash and Barnier 2008).

Introduction

Hypnosis had its origins in the practices of Franz Anton Mesmer in eighteenth-century Vienna and Paris and got its modern name from James Braid, based on an analogy with sleep (Kihlstrom 1992). Mesmer's theory of animal magnetism was discredited by a commission led by Benjamin Franklin in 1784 (Kihlstrom 2002), but mesmerism was revived in the 1840s when James Elliotson and James Esdaile used it successfully to relieve pain in surgical patients. Scientific interest was further stimulated by William James, who believed that hypnosis was relevant to the problem of the will (Kihlstrom and McConkey 1990), and by Jean-Martin Charcot and Pierre Janet, who viewed hypnosis as an analog of hysteria (now known as the dissociative and conversion disorders; see Kihlstrom 1994). In the 1920s, research on hypnosis was carried out by P.C. Young and others at Harvard; and in the 1930s, before he ventured into learning theory, C.L. Hull carried out an extensive program of hypnosis research at Wisconsin in the 1930s. Beginning in the late 1950s, hypnosis entered a sort of Golden Age, with research by E.R. Hilgard, M.T. Orne, T.R. Sarbin, T.X. Barber, K.S. Bowers, their students and colleagues, and many others, and increasing interest in clinical applications in medicine, dentistry, and psychotherapy stimulated by Milton Erickson and others (Gauld 1992).

Common phenomena of hypnosis include: ideomotor suggestions, including direct suggestions for the facilitation of motor activity (e.g., hand levitation) and challenge suggestions for the inhibition of motor activity (e.g., arm rigidity); sensory anesthesias in all modalities, and positive and negative hallucinations; age regression; posthypnotic suggestion; and posthypnotic amnesia.

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However, not every subject will have these experiences. Hypnotic "virtuosos" are relatively rare, comprising less than 10% of the population.

Measuring Hypnotizability

Hypnotizability is measured by performance-based work samples such as the individually administered Stanford Hypnotic Susceptibility Scales (Forms A, B, and C) and the Harvard Group Scale of Hypnotic Susceptibility, Form A. Because it samples a wider swath of the domain of hypnosis, the Stanford Form C is generally considered to be the gold standard for measuring hypnotizability. All of these scales begin with a standardized hypnotic induction procedure consisting of suggestions for relaxation and focused attention, followed by suggestions for a representative series of hypnotic suggestions; response to each suggestion is scored objectively in terms of some observable behavioral response. Hypnotizability, so measured, follows a quasi-normal distribution in the population, with some skew to the right and a hint of bimodality.

There is a lingering question as to whether hypnotizability is best characterized as a single dimension, much like Spearman's *g*, or is multidimensional, like Thurstone's primary mental abilities. Factor analyses of the standardized scales generally yield three or four factors, representing two types of ideomotor suggestions (direct suggestions for the facilitation of some motor response and challenge suggestions for the inhibition of voluntary motor activity); perceptual-cognitive alterations, such as positive and negative hallucinations; and posthypnotic amnesia. These factors are not an artifact of differential item difficulty, suggesting that their constituent items tap different component abilities. This factor structure, in turn, suggests that there may be different "types" of hypnotizable individuals, who are good at some kinds of items but not at others (Kihlstrom 2015). Still, the factors themselves are strongly intercorrelated, justifying the measurement of hypnotizability as a single dimension.

Hypnosis involves suggestions, but not all suggestions are alike. Hypnosis seems most closely related to "primary" suggestibility, involving direct, explicit suggestions for some effect (e.g., the body sway test), but even this connection is relatively weak. But there are other forms of suggestibility to which hypnosis does not seem to be closely related: including "secondary" suggestibility, involving implied suggestions (e.g., the progressive weights illusion), and "tertiary" suggestibility (e.g., conformity, persuasion, and other forms of social influence); "interrogative" suggestibility, which can bias eyewitness testimony; and the placebo effect – not to mention the kinds of suggestions that people make to each other in the ordinary course of everyday living.

Personality Correlates of Hypnotizability

The search for personality correlates of hypnotizability was long a study in frustration, as scores on the standardized scales did not correlate with scores on such inventories as the MMPI and CPI. However, hypnotizability does correlate with the tendency to have "hypnotic-like" experiences in the ordinary course of everyday living, such as becoming deeply involved in reading (the "book-reading fantasy"), music, or nature. Measurement of these experiences culminated in Tellegen's development of a scale to measure "absorption," a disposition to experience states of narrowed or focused attention, resulting in a blurring of ego boundaries. However, the actual correlation between absorption and hypnotizability is relatively weak, so that hypnotizability cannot be confidently predicted in advance by means of the Absorption scale or any of the usual sorts of paper-and-pencil questionnaires.

Absorption, in turn, is a component of openness to experience, one of the "Big Five" dimensions of personality. But openness as currently measured is a sort of hodgepodge of absorption, intellectance, and sociopolitical liberalism: hypnotizability correlates only with the first of these facets (Glisky and Kihlstrom 1993). In this way, studying a relatively narrow problem in

hypnotizability has contributed to a better understanding of the structure of personality in general.

Theories of Hypnosis

Skepticism about hypnosis goes back to Mesmer and Esdaile. Most modern theorists agree that hypnosis is "genuine," in the sense that hypnotic subjects really do experience what is suggested to them, but differ about the mechanisms involved. One group of theories emphasizes alterations of consciousness occurring during hypnosis. According to one view, hypnotic phenomena are characterized by a division in consciousness, such that the subject is unaware of percepts and memories that continue to influence experience, thought, and action outside of conscious awareness. In another version, the dissociative process alters the hierarchy of executive control systems, so that hypnotic phenomena occur automatically, not as a result of deliberate effort.

Other approaches focus on underlying social-cognitive processes. In one view, hypnotic suggestions are mediated by positive response expectations which, somewhat like placebo effects, generate nonvolitional experiences through ideomotor action. According to another, features of the hypnotic context encourage both positive responses to hypnotic suggestions and a misappraisal of these responses as involuntary experiences rather than voluntary actions. At the neuroscientific level of analysis, much speculation focuses on the dorsolateral prefrontal cortex and the "default mode network" (Halligan and Oakley 2013; Kihlstrom 2013).

Applications

Theoretical disputes aside, hypnosis has found a number of applications in medicine, dentistry, psychotherapy, and sports psychology. Certainly the most popular (and effective) application involves suggestions for analgesia to control pain (Hilgard and Hilgard 1975; Jensen and Patterson 2014). Of course, hypnotizability matters, but clinical studies indicate that hypnotic suggestions can produce significant pain relief in up to 50% of unselected patients. Hypnosis has been shown to be cost-effective in outpatient surgery, for example, reducing both medication usage in controlled sedation and procedural complications; it is also cost-effective, even though it adds another staff member (the hypnotist) to the operating room. The effects of hypnosis are not attributable to the placebo effect, or the effects of relaxation and distraction, and affect both the sensory and suffering components. As another benefit, there is also evidence that hypnotic suggestions can accelerate the healing of surgical wounds.

Hypnosis has long been used in psychotherapy (Lynn and Kirsch 2006; Lynn et al. 2011). Charcot and Janet employed hypnosis in the diagnosis and treatment of hysteria. Although Freud, who studied with Charcot (and competed with Janet), ultimately rejected hypnosis, hypnoanalysis developed later under the theory that the state represented an adaptive regression that would facilitate potentiate psych. A form of hypnotherapy popularized by Milton Erickson, employing indirect suggestion, metaphors, and paradoxical intention, among other "utilization techniques," inspired Gregory Bateson's concept of the double bind and Jay Haley's "strategic" approach to family therapy. Although tempting, it is not usually advisable to employ direct hypnotic suggestions for symptom control. The admonition that hypnosis cannot make subjects do anything they otherwise would not want to do applies to therapy as well as to antisocial behavior. Along the same lines, clinicians should be careful not to treat with hypnosis any condition that they are not qualified to treat *without* hypnosis.

Hypnosis has also found a place in modern cognitive behavioral therapy (CBT), often as an adjunct to other techniques (Green et al. 2014). Early on, for example, Joseph Wolpe used hypnosis to enhance relaxation during systematic desensitization. More recently, an emerging literature strongly suggests that adjunctive hypnosis can potentiate outcome in a number of different domains, including anxiety disorders, depression, eating disorders, and post-traumatic stress disorder (PTSD). In some cases, such as PTSD and

depression, the evidence favoring hypnosis meets the strictest criteria for an "empirically supported treatment" (Chambless and Hollon 1998). In other cases, hypnosis is promising, but the research design lacks one or another feature that would meet this standard. Of course, the success of adjunctive hypnosis may depend on the hypnotizability of the patient. Precisely how hypnosis potentiates CBT is not well understood, and it has been argued that the hypnotic context has a sort of placebo effect, capitalizing on patients' beliefs about hypnosis and enhancing their expectations concerning the outcome of treatment. Unfortunately, the use of hypnosis in psychotherapy is hampered by the relative lack of training in hypnosis in medical and graduate schools. In the United States, excellent training is offered by the Society for Clinical and Experimental Hypnosis and the American Society of Clinical Hypnosis, professional organizations which also publish journals devoted to clinical and experimental research.

Conclusion

Hypnosis offers much to interest a personality psychologist. It exemplifies the challenge of objectively studying subjective mental states. Hypnosis underscores the interaction of aptitude and attitude in human performance; it brings into bold relief the question of how ideas translate into actions; and the relationship between hypnotist and subject provides a laboratory model for the study of dyadic interactions in general. And the search for the correlates of individual differences in hypnotizability revealed a heretofore unappreciated dimension of personality, openness to experience, whose various facets deserve further exploration in the future. Research on the development of hypnotizability may offer a new view of the child's distinction between imagination and reality and the development of the theory of mind in general.

References

Chambless, D. L., & Hollon, S. D. (1998). Defining empirically supported therapies. *Journal of Consulting & Clinical Psychology, 66*, 7–18.

Gauld, A. (1992). *A history of hypnotism*. Cambridge, UK: Cambridge University Press.

Glisky, M. L., & Kihlstrom, J. F. (1993). Hypnotizability and facets of openness. *International Journal of Clinical & Experimental Hypnosis, 41*(2), 112–123.

Green, J. P., Laurence, J.-R., & Lynn, S. J. (2014). Hypnosis and psychotherapy: From Mesmer to mindfulness. *Psychology of Consciousness: Theory, Research, & Practice, 1*(2), 199–212.

Halligan, P. W., & Oakley, D. A. (2013). Hypnosis and cognitive neuroscience: Bridging the gap. *Cortex, 49*(2), 359–364.

Hilgard, E. R., & Hilgard, J. R. (1975). *Hypnosis in the relief of pain*. Los Altos: Kaufman.

Jamieson, G. A. (Ed.). (2007). *Hypnosis and conscous states: The cognitive neuroscience perspective*. Oxford: Oxford University Press.

Jensen, M. P., & Patterson, D. R. (2014). Hypnotic approaches for chronic pain management: Clinical implications of recent research findings. *American Psychologist, 69*(2), 167–177.

Kihlstrom, J. F. (1992). Hypnosis: A sesquicentennial essay. *International Journal of Clinical & Experimental Hypnosis, 40*(4), 301–314.

Kihlstrom, J. F. (1994). One hundred years of hysteria. In S. J. Lynn & J. W. Rhue (Eds.), *Dissociation: Clinical and theoretical perspectives* (pp. 365–394). New York: The Guilford Press.

Kihlstrom, J. F. (2002). Mesmer, the Franklin Commission, and hypnosis: A counterfactual essay. *International Journal of Clinical & Experimental Hypnosis, 50*, 408–419.

Kihlstrom, J. F. (2008). The domain of hypnosis, revisited. In M. Nash & A. Barnier (Eds.), *Oxford handbook of hypnosis* (pp. 21–52). Oxford: Oxford University Press.

Kihlstrom, J. F. (2013). Neuro-hypnotism: Hypnosis and neuroscience. *Cortex, 49*(2), 365–374.

Kihlstrom, J. F. (2015). Patterns of hypnotic response, revisited. *Consciousness & Cognition, 38*, 99–106.

Kihlstrom, J. F., & McConkey, K. M. (1990). William James and hypnosis: A centennial reflection. *Psychological Science, 1*(3), 174–178.

Lynn, S. J., & Kirsch, I. (Eds.). (2006). *Essentials of clinical hypnosis: An evidence-based approach*. Washington, DC: American Psychological Association.

Lynn, S. J., Rhue, J. W., & Kirsch, I. (Eds.). (2011). *Handbook of clinical hypnosis* (2nd ed.). Washington, DC: American Psychological Association.

Nash, M. R., & Barnier, A. J. (Eds.). (2008). *Oxford handbook of hypnosis: Theory, research and practice*. Oxford, UK: Oxford University Press.